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REMARKS

This Amendment is responsive to the Office Action dated March 9, 2004. All objections and rejections of the Examiner are respectfully traversed. Reconsideration and further examination is respectfully requested.

In paragraphs 2-14 the Examiner rejected claims 1-33 for obviousness under 35 U.S.C. 103, citing the combination of United States patent number 6,438,141 of Hanko et al. ("Hanko et al.") and United States patent number 6,598,080 of Nagami et al. ("Nagami et al."). Applicants respectfully traverse this rejection.

Hanko et al. disclose a system for managing communications over communication media that quantifies and controls data streams, and that provides for estimation of data rate needs, measurement and analysis of current and historical data rate parameters, dynamic allocation of available bandwidth, and that supports cooperation between data sources and destinations in the management processes. Hanko et al. specifically teach the possibility of processing requests for bandwidth from data sources, that are sent to the intended receiver of the data, such that the receiver allocates available bandwidth in the communication medium based on these requests from the data sources, and advises the sources of their allocations.

Hanko et al. go on to describe a technique for predicting future bandwidth requirements of the sources that utilizes historical information concerning data rates, and that applies an exponential moving average (EMA) method to predict anticipated future data rates. The parameters of the EMA method discussed in Hanko et al. are described therein as potentially selected in order to provide any desired statistical measurement of data rates, such as a close

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approximation of the mean plus one standard deviation on normally distributed streams of data or sets of bandwidth allocations.

Hanko et al. teach that their system can be implemented using a computer including a video memory, main memory and mass storage, all coupled to bi-directional system bus, along with keyboard, mouse and processor. The mass storage of Hanko et al. may include both fixed and removable media, such as magnetic, optical or magnetic optical storage systems or any other available mass storage technology. The Hanko et al. system bus is described as containing thirty-two address lines for addressing video memory or main memory, and also including, a 32-bit data bus for transferring data between and among the components.

As further described by Hanko et al., a data source may estimate bandwidth needs in bits per second and/or pixels per second by monitoring command issuance. Hanko et al. specifically teach a data source calculating a number of bits or pixels that will be generated by a command and the period of time over which they will be generated, and dividing the number of bits or pixels by the period of time, to generate a bits per second or pixels per second value. The data source of Hanko et al. statistically combines these values with historical data for these values to produce statistical values, such as a set of values representative of the mean plus one standard deviation of the bits per second and pixels per second values. These statistical values are used by the Hanko et al. system to produce an estimate of bandwidth needs in both bits per second and pixels per second.

Nagami et al. disclose a network interconnection system for high speed, large capacity inter-network communication, in which a control message is transmitted to a network interconnection apparatus connecting one logical network and another logical network when a new node is activated beyond the network interconnection apparatus. The control message of

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Nagami et al. includes information for storing, in a memory of a node, a correspondence relationship between a first virtual path to be used in receiving a packet from the first logical network to a virtual path to be used in transmitting the packet to the other logical network.

Nowhere in the combination of Hanko et al. and Nagami et al. is there disclosed or suggested any system or method for monitoring a network, that includes:

...

reading an entry of a memory device, the entry of the memory device containing a first statistical value and a second statistical value, *wherein the entry is a single memory location of the memory device, wherein the first statistical value includes a packet count, and wherein the second statistical value includes a byte count,*

determining a third statistical value based on at least one of a content of the at least one data packet, the first statistical value, and the second statistical value; and

storing the determined third statistical value in the entry of the memory device.
(emphasis added)

as in the present independent claims 1, 12 and 23. In contrast, Hanko et al. only describes the use of a computer system with a 32-bit system bus to access memory and/or mass storage, in which a bit or pixel rate may be combined with historical statistical values, to produce statistical values such as a statistical mean plus one standard deviation of the bits per second and pixels per second values. Nagami et al. teaches using a memory unit to store a correspondence between destination information for the packet and a virtual path to be used in transmitting the packet. Neither Hanko et al. nor Nagami et al. provide any hint or suggestion of even the desirability of providing any system or method that includes *storing packet count and byte in a single memory location, such that another statistical value is determined based on the content of a received data packet, and is then written to that single memory location,* as in the present independent claims 1, 12 and 23.

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For the above reasons, Applicants respectfully urge that the combination of Hanko et al. and Nagami et al. fails to disclose or suggest all the features of the present independent claims 1, 12 and 23. Accordingly, the combination of Hanko et al. and Nagami et al. does not support a *prima facie* case of obviousness with regard to the present independent claims 1, 12 and 23 under 35 U.S.C. 103. As to the remaining claims, they each depend either directly or indirectly from independent claims 1, 12 and 23, and are respectfully believed to be patentable over the combination of Hanko et al. and Nagami et al. for at least the same reasons. Reconsideration of all pending claims is respectfully requested.


In view of the above, Applicants respectfully urge that the present claims are allowable, and request that the rejections of the Office Action be withdrawn.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date


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